



CITY OF FALLS CHURCH

Date: June 2021
To: Mayor Tarter and Members of Falls Church City Council
From: Citizens' Advisory Committee on Transportation
Subject: Recommended Locations to Construct Protected Bike Lanes

Background

After the joint Feb. 18, 2021 meeting of the Environmental Sustainability Council (ESC) and the CACT, both committees agreed to further explore ways to improve bicycling in Falls Church. Two questions were raised:

1. Is there a viable route for students to safely bicycle to the middle and high schools from the W&OD Trail across or parallel to the Falls Plaza (the shopping center with Giant and Staples that is being rebranded as Birch & Broad) property?
2. Where should Falls Church City prioritize building its first 1-2 miles of protected bicycle lanes?

This memo focuses on the CACT's exploration of the second question and identifies several segments to prioritize for protected bike lanes, based on:

1. The road being a useful connection for bicyclists
2. The road or alternatives being unsafe to ride "as is"
3. A modest level of change/construction required.

For purposes of this memo, a "protected bicycle lane" means a facility for bicyclists and other mid-speed traffic (e.g., scooters and e-bikes) that is physically separated by automobile traffic by some sort of barrier. The exact facility is generally not specified here, for example whether it is a 2-way bike lane on one side of the street or two 1-way lanes on each side and whether the protection is provided by plastic bollards, plastic curbs, concrete curbs, and/or parked cars.

Protected bicycle lanes are increasingly being realized as an important element in enabling "mobility for all modes." Simple painted lanes place bicyclists side-by-side with automobile traffic, which creates an unacceptable amount of risk to many potential bicycle riders. As a general rule, if the road space does not feel comfortable to walk on with a child, then it is not safe enough to support bicycling by the general population. Protected bicycle lanes help solve this issue.

1.8 miles of protected bike lanes are readily implementable

- **Park Avenue from N. West Street to Washington Boulevard (0.9 miles)**
 - Would create critical, safer east-west bicycle link parallel to Broad St. from Founders Row to State Theatre
 - The [Bicycle Master Plan](#) indicates this should be a sort of shared bicycle boulevard although the faded sharrows do little to give road users this impression
 - Protected bike lane would likely displace some parking, which appears manageable given increasing urban character, and plentiful adjacent side streets and parking lots/garages
 - Protected bike lanes and reduced parking would contribute to the Civic Great Street intent, reducing pedestrian crossing distances against automobile traffic, visually narrow the roadway to reduce traffic speeds, and increasing the presence of visible faces on bike, scooter, foot, etc.
- **S. Maple Ave. from Broad St. to Fairfax St. (0.2 miles)**
 - Bicycle lanes already exist, but protection could be added
 - Provides a link between Broad St. and Tinner Hill commercial areas
 - Does not provide a full connection but provides protection on area of S. Maple with most traffic
 - Could be built as part of the One City Center development

- **Annandale Road from Washington St. to Big Chimneys Park (0.2 miles)**
 - Achievable with [road diet](#) (four-lane road today) and minor parking impacts
 - Creates a stronger link between multiple commercial areas on Annandale Road that would be otherwise unsuitable for most bicycle users
 - Could be built as part of the One City Center development
- **Hillwood Ave. from Cherry St. to Washington St. (0.5 miles)**
 - Bicycle lanes already exist for most of the distance and would just need protection added
 - Solving for a safe bicycle route across Annandale Road and to the new multi-modal transit plaza (with a link north from there to S. Maple Ave.) would remove a major barrier to bicycling in area

1.3 more miles of protected bike lanes would critical transportation links

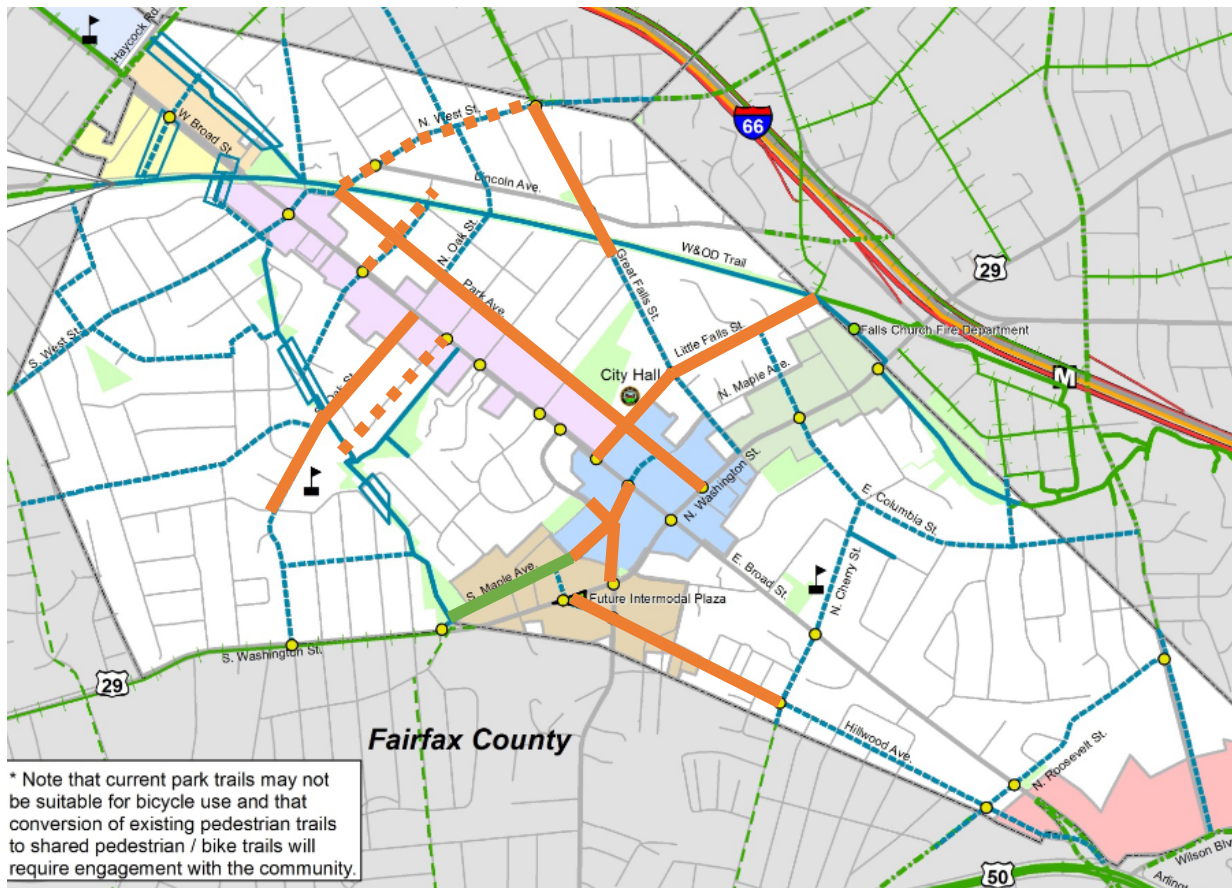
- **S Oak St. (or S. Lee St.) from Broad St. to Seaton Lane (0.5 miles)**
 - Provides a link to TJ/Oak St. Elementary from Broad St. and neighborhoods north and a link to the trail along Tripps Run
 - Would be particularly effective when combined with intersection improvements planned for Broad St.
 - Would likely have a neighborhood parking impact that would need to be understood but parking utilization on the east side of S. Oak St. appears to be low
 - Because S. Oak St. serves as a cut-through from Washington St. (Route 29) to Broad St., it is not as safe to bike on today as a “neighborhood street” might suggest.
 - Could be incorporated into neighborhood traffic calming discussions for this area and into bridge replacement work; adding a protected bike lane would act as a traffic calming measure. Alternatively, a route down S. Lee St. to existing off-road trail could be built, although parking here appears more utilized.
 - Could be built as a 2-way cycle track on the east side of S. Oak Street, given the presence of only one intersection (S Lee Street) between Broad St. and Seaton Ln.
- **Little Falls from the W&OD Trail to Broad St. (0.5 miles)**
 - Would provide a clear link from the W&OD’s new bike bridge to City Hall and nearby commercial areas
 - Could be a protected cycle track (one side of road only) on west side
 - While this would likely have some parking impact, utilization is low most weekdays and it is a quieter street so crossing the street to get to your car is not a major challenge.
 - Neighborhood traffic calming measures (curb extensions and speed hump) may present some challenges
- **Great Falls from West St. to Riley St. (0.3 miles)**
 - This provides a direct connection to the W&OD Trail for people coming from the Williamsburg Boulevard bike lanes in Arlington and for Falls Church City residents who live north of the W&OD.
 - The section from the W&OD to Riley St. would link the trail to neighborhood streets that provide access to Broad St. commercial areas.
 - This road is unsuitable for most bicycle users today due to traffic volumes and speed. Bicycle lanes would help reduce average vehicle speeds.
 - Protected bike lanes would impact parking but utilization is low
 - Could be a protected cycle track (one side of the road) on west side

More areas to consider for protected bike lanes

- **N. Spring St. (0.2 miles)** would connect the W&OD to neighborhood streets south of Broad St. including Berman Park and the future “Green Loop”. The road is a wide 1-way for one block and neighborhood street for one block, so adding a 2-way bicycle lane would allow bicyclists access southbound and minimal change would be needed. S. Spring St. is too narrow for a bicycle lane.
- **South Maple Ave. from Fairfax Drive to Cavalier Trail Park (0.3 miles)** this should be considered for a more thorough Bicycle Boulevard treatment (see below for examples, this involves more than painting “sharrows”). It is too narrow for a bicycle lane (without removing high-utilization parking) but could work as a Boulevard. Could be done with any Tinner Hill area redevelopment along South Maple.
- **West St. (1.3 miles)** could be a valuable link between Founders Row, the W&OD, and the bike lanes in Arlington. However, road width, traffic, and parking utilization likely make it infeasible to add bicycle lanes (protected or otherwise) in the near future.

Map of recommended routes (overlaid on Falls Church City Bicycle Master Plan)

- Recommended segments are shown in **orange**
- Alternative to Oak St. (Lee St.) and West Falls optional segment are shown in **dotted orange**
- Recommended enhanced bicycle boulevard routes are shown in **green**



Examples of bicycle infrastructure

Park Avenue in 2021

Faded sharrows are only existing bicycle infrastructure.



Sample bicycle boulevard with distinctive markings



Bicycle facilities

Bicycle lane (S. Maple Ave.)



Protected bicycle lane (L St. NW, D.C.)



Protected cycle track (1st St. NE, D.C.)



Protected bike lanes assessment of major connecting roads (based on 2015 Bicycle Master Plan)

Road	From/To	Length (miles)	Solves a gap in bike network	Risky to ride "as is"	Easy to add PBL
S. West St.	Broad St. to City line	0.6	Access to W&OD and Founders Row	Through street with traffic	Significant local parking impact
N. West St.	Broad St. to City line	0.7	Link to Arlington bike lanes & Founders Row	Through street with traffic	Significant local parking impact
Great Falls St.	N West St. to Washington St.	0.8	Link W&OD to areas north and south	Through street with traffic	Feasible north of Riley St.; too narrow further south
Park Ave.	Washington St. to West St.	0.9	Access to Broad St. commercial area	Limited local traffic	Very wide street
N. Spring St.	Broad St. to W&OD	0.2	Link W&OD to Broad & south FCC	Must ride on sidewalk southbound	Wide 1-way street; ample space for 2-way protected lane; S. Spring St. too narrow
Little Falls St.	W&OD to Broad St.	0.5	Either option would link W&OD to Broad and Maple area	Limited traffic, lights	Parking impact but may be manageable
N. Maple Ave.	Broad St. to E. Jefferson St.	0.5		Limited local traffic	Significant local parking impact
S. Maple Ave.	Washington St. to Broad St.	0.5		Multi-lane road	Feasible north of Fairfax St. (unprotected bike lanes exists)
Annandale Road	Broad St. to Hillwood Ave	0.4		Multi-lane road	Feasible by reducing road from 4 travel lanes to 2 lanes
Hillwood Ave.	Washington St. to Roosevelt	0.9	Link to east FCC and Seven Corners	Multi-lane road	Bike lanes exist to Smallwood Way
E. & W. Columbia St.	Cherry St. to Little Falls	0.4	East-West link across Washington	Limited local traffic	Significant local parking impact
N Roosevelt St.	Broad St. to City line	0.5	Link to Hillwood and EFC Metro	Multi-lane road	Unclear if road is wide enough
S. Oak St. and/or S. Lee St.	Broad St. to Seaton Lane	0.5	Connection to TJ/Oak St. Elementary	Cut-through from Route 29	Parking impact but may be manageable (low utilization)
South FCC roads to complete "Green Loop" (Portions of Sherrow, Oak/Timber/Parker /Spring, Ellison)		0.5	Connects multiple linear park paths; eventual W&OD link at Founders II	Neighborhood streets	Parking impact but may be manageable (low utilization)